

### **REMARKS**

In response to the Office Action mailed December 18, 2006, Applicants respectfully request reconsideration. To further the prosecution of this application, amendments have been made in the claims, and each of the rejections set forth in the Office Action has been carefully considered and is addressed below. The claims as presented are believed to be in condition for allowance.

Claims 1-20 were previously pending in the application. Claims 6, 7, 11, 16 and 17 are amended herein. No claims have been added or canceled. As a result, Claims 1-20 remain pending for examination, with claims 1 and 11 being independent. No new matter has been added.

#### **Claim Rejections Under 35 U.S.C. §101**

Claims 11-17 are rejected under 35 U.S.C. §101 for purportedly being directed to non-statutory subject matter. Specifically, the Office Action contends that the steps in the method recited by claim 11 fail to produce a "tangible, real-world" result.

Without acceding to the propriety of the rejection, claim 11 is amended herein to recite displaying an image corresponding to an identified tempo on an image display device. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 11-17 under 35 U.S.C. §101.

#### **Claim Rejections Under 35 U.S.C. §102**

Claims 1-7 and 11-17 are rejected under 35 U. S. C. §102(b) as purportedly being anticipated by U.S. Patent No. 5,614,687 to Yamada et al. ("Yamada"). Applicants respectfully traverse this rejection, as the cited reference fails to satisfy all of the claim limitations.

A. Claims 1-10

Claim 1 recites a tempo analyzing apparatus comprising a peak detecting means for detecting positions of a plurality of ones, higher than a predetermined threshold, of peaks of change in level of an input sound signal; a time interval detecting means for detecting a time interval between peak positions detected by the peak detecting means in a predetermined unit-time interval; and an identifying means for identifying a tempo of sound to be reproduced with the sound signal on a basis of a frequently occurring one of the time intervals detected by the time interval detecting means.

Yamada fails to disclose or suggest all of the limitations recited by claim 1. For example, Yamada fails to disclose or suggest identifying a tempo of sound on a basis of a frequently occurring time interval between peak positions. Specifically, the apparatus disclosed by Yamada detects a number of beats by (1) detecting an interval which starts when an input sound signal first reaches a high level and ends when the sound signal again reaches that high level, and (2) calculating a number of beats per minute based on the detected interval (col. 3, lines 57-63).

Yamada discloses, with reference to FIG. 1, three BPM detectors 101-103 to which an analog audio signal is fed (col. 3, lines 8-10). BPM detector 101, used to process a low frequency band, includes signal slice pulse converter 5 and BPM converter 7 (col. 3, lines 57-58). BPM converter 7 begins to measure an interval between beats when the output level of the signal slice pulse converter 5 reaches a high level, and stops measuring the interval when the output level of the signal slice pulse converter 5 again reaches the high level (col. 3, lines 58-63). Measurement of the interval begins at time point  $t_1$  (shown in FIG. 6D) when the signal level first reaches a threshold (col. 5, lines 45-56). When the signal again reaches the threshold, the interval  $T_2$ , equal to the time between points  $t_1$  and  $t_3$  (FIG. 6D) is determined (col. 6, lines 6-12). The number of beats is then calculated based on the interval  $T_2$  (col. 6, lines 12-17; see also col. 3, lines 57-65).

Yamada says nothing at all about identifying a tempo of sound to be reproduced with a sound signal on a basis of a frequently occurring time interval, as required by claim 1. The only

interval detected in the system of Yamada is T2, from which the number of beats per minute is calculated.

Accordingly, claim 1 patentably distinguishes over Yamada, such that the rejection of claim 1 under 35 U.S.C. §102(b) as purportedly being anticipated by Yamada should be withdrawn.

Claims 2-10 depend from claim 1 and are allowable for at least the same reasons.

B. Claims 11-20

Claim 11 recites a tempo analyzing method comprising detecting positions of a plurality of ones, higher than a predetermined threshold, of peaks of change in level of an input sound signal; detecting a time interval between the detected peak positions in a predetermined unit-time interval; and identifying a tempo of sound to be reproduced with the sound signal on a basis of one, having occurred at a high frequency, of the detected time intervals.

It should be appreciated from the discussion above related to claim 1 that Yamada fails to disclose or suggest identifying a tempo of sound to be reproduced with the sound signal on a basis of one, having occurred at a high frequency, of the detected time intervals. Accordingly, claim 11 patentably distinguishes over Yamada, such that the rejection of claim 11 under 35 U.S.C. §102(b) as purportedly being anticipated by Yamada should be withdrawn.

Claims 12-20 depend from claim 11 and are allowable for at least the same reason.

**CONCLUSION**

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

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Respectfully submitted,

By Randy J. Pritzker  
Randy J. Pritzker  
Registration No.: 35,986  
WOLF, GREENFIELD & SACKS, P.C.  
Federal Reserve Plaza  
600 Atlantic Avenue  
Boston, Massachusetts 02210-2206  
(617) 646-8000